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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,612	01/22/2002	Peter Bissinger	0475-0199P	6493

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EXAMINER

PENG, KUO LIANG

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Continuation of Attachment(s) 6). Other: English translation of JP 06-228439.

Office Action Summary

Application No.

10/031,612

Applicant(s)

BISSINGER ET AL.

Examiner

Kuo-Liang Peng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/28/02 IDS.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☒ Claim(s) 4-16 is/are rejected.
- 7) ☒ Claim(s) 6-8, 11-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

DETAILED ACTION

1. The Applicants' preliminary amendment filed on January 22, 2002 was received. Claims 4, 6-10, 13 and 15 are amended.

Specification

2. The disclosure is objected to because of the following informalities:

In line 28 of page 18, should "m = 1, 3 or 3, with n + m 4," be -- m = 1, 2 or 3, with n + m < 4 --?

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Appropriate correction is required.

Claim Objections

3. Claims 6-8 and 11-14 are objected to because of the following informalities:

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In Claim 6 (line 5) and Claim 14 (line 4), should " $R_e(R^{10}Z')_fSiX_{4-(e+f)}$ " be -- $R_e(Z'R^{10})_fSiX_{4-(e+f)}$ -- because it is the radical R^{10} which links Z' and Si?

In Claims 7-8, Applicants are advised to spell out the meaning of the radicals X and R in the instant claims, rather referring them to other claim on which the instant claims do not depend.

In Claim 7 (last line), should " $n + m4$ " be -- $n + m < 4$ --?

In Claim 8 (line 4), should " AIR^0 " be -- AIR^0_3 --?

In Claim 8, should the limitation of the sum of y and z being 4 be included as indicated in the specification (page 22, lines 1-3)?

Should the last line of Claim 11 be deleted?

In Claims 12 and 14, Applicants are advised to spell out the meaning of the radicals and indices in the instant claims, rather referring them to other claims on which the instant claims do not depend.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 4-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 4 (line 4), it is not clear as to what “hydrolytically condensable compounds of silicon” refers to. Applicants are advised to clarify it by amending the instant claim and the dependent claims thereof using the language for a conventional method claim.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by “such as” and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 8 recites the broad recitations “y is an integer from 1 to 4” and “z stands for 0, 1, 2, or 3”, and the claim also recites “in particular 2 to 4” and “preferably for 0, 1 or 2”, which are the narrower statements of the ranges/limitations.

Claim 11 provides for the use of the silanes according to claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without

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any active, positive steps delimiting how this use is actually practiced. Notes that there is no step of incorporating the silanes according to Claim 1. Applicants are advised to amend the instant claim and the dependent claims thereof using the language for a conventional method claim.

Claim 16 provides for the use of the silanes according to claim 1 or 2, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

7. Claims 11 and 16 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

7. The last reference cited in PTO-1449 filed on February 28, 2002 has been modified to show the proper source of the reference as indicated in the hardcopy of the abstract provided by Applicants.

8. The following references cited in the specification have been considered:

EP 450 624, EP 682 033, DE 34 07 087, DE 4 011 044, EP A-91 105 355, DE 4 125 201, DE 4 310 733 and DE 4 405 261.

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9. The following "X" references cited in the international search report are not relied upon because none of them teaches or fairly suggests the use of the hydrolysable and polymerizable silanes of the general formula I recited in Claim 1 of the instant invention.

WO 94/06807

Ishikawa et al., Organometallics, vol. 10, No. 8, pp. 2701-2706 (1991)

JP 07-173178

JP 11-001530

Abstract of Goedel et al., Polym. Prep. Am. Chem. Soc., Div. Polym. Chem., 1997, 38(1), 960.

Allowable Subject Matter

10. Claims 1-3 are allowed.

11. The following is an examiner's statement of reasons for allowance:

The present claims are allowable over the closest reference: Yanagisawa (JP 06-228439).

Yanagisawa discloses a hydrolysable and polymerizable silane having formula 2 wherein n is at least 3 ([0006]). However, Yanagisawa does not teach or fairly suggest the hydrolysable and polymerizable silanes of the general formula I recited in Claim 1 of the instant invention.

12. Claims 4-16 would be allowable if rewritten to overcome the rejection(s) under claim objection and/or 35 U.S.C. 112, second paragraph and/or 35 U.S.C. 101 rejection, set forth in

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this Office action and to include all of the limitations of the base claim and any intervening claims.

The patentability of the instant claims is described in the previous paragraph.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (703) 306-5550.

The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson, can be reached on (703) 308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Kuo-Liang Peng

April 24, 2003

A handwritten signature in black ink, appearing to read 'Kuo-Liang Peng', is written over the typed name and date.